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2. (Amended) The program storage device of claim 1, wherein the compression rate is at least equal to the ratio of the input data transmission rate to the data storage rate so as to provide continuous storage of the input data stream at the input data transmission rate.

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4. (Amended) The program storage device of claim 3, wherein the instructions for performing the adjusting step include instructions for performing one of adjusting the input data transmission rate, adjusting the compression rate and a combination thereof.

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6. (Amended) The program storage device of claim 1, further including instructions for performing the steps of:

retrieving the compressed data stream from the target storage device at a rate equal to a data access rate of the target storage device; and

decompressing the compressed data at a decompression rate that increases the effective data access rate of the target storage device.

7. (Amended) The program storage device of claim 6, wherein the decompression rate is equal to the ratio of the data access rate to the input data transmission rate so as to obtain an output data transmission rate which is equal to the input data transmission rate.

8. (Amended) The program storage device of claim 6, wherein the decompression rate is equal to or greater than the ratio of the data access rate to a maximum accepted output data transmission.

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10. (Amended) The program storage device of claim 9, wherein the instructions for performing the adjusting step include instructions for performing one of adjusting the data retrieval rate, adjusting the decompression rate, and a combination thereof.

13/19. (Amended) A system for accelerating the rate of data storage and retrieval of a data storage device, comprising:

means for receiving a data stream having an input data transmission rate which is greater than a data storage rate of the data storage device;

means for compressing the data stream at a compression rate that increases the effective data storage rate of the data storage device; and

means for storing the compressed data stream in the data storage device.

14/20. (Amended) The system of claim 13/19, wherein the compression rate is at least equal to the ratio of the input data transmission rate to the data storage rate so as to provide continuous storage of the input data stream at the input data transmission rate.

15/21. (Amended) The system of claim 13/19, further comprising:
means for receiving the compressed data stream from the storage device at a rate equal to a data access rate of the storage device; and

means for decompressing the compressed data at a decompression rate that increases the effective data access rate of the storage device.

16/22. (Amended) The system of claim 15/21, wherein the decompression rate is equal to the ratio of the data access rate to the input data transmission rate so as to obtain an output data transmission rate which is equal to the input data transmission rate.

25/30. (Amended) A method for providing accelerated data storage and retrieval, comprising the steps of:

receiving a data stream at an input data transmission rate which is greater than a data storage rate of a target storage device;

compressing the data stream at a compression rate that increases the effective data storage rate of the data storage device; and

storing the compressed data stream in the target storage device.

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~~31~~. (Amended) The method of claim ²⁵~~30~~, wherein the compression rate is at least equal to the ratio of the input data transmission rate to the data storage rate so as to provide continuous storage of the input data stream at the input data transmission rate.

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~~33~~. (Amended) The method of claim ²⁷~~32~~, wherein the adjusting step includes one of adjusting the input data transmission rate, adjusting the compression rate, and a combination thereof.

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~~35~~. (Amended) The method of claim ²⁵~~30~~, further including the steps of:
retrieving the compressed data stream from the target storage device at a rate equal to a data access rate of the target storage device; and
decompressing the compressed data at a decompression rate that increases the effective data access rate of the target storage device.

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~~36~~. (Amended) The method of claim ³⁰~~35~~, wherein the decompression rate is equal to the ratio of the data access rate to the input data transmission rate so as to obtain an output data transmission rate which is equal to the input data transmission rate.

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~~37~~. (Amended) The method of claim ³⁰~~36~~, wherein the decompression rate is equal to or greater than the ratio of the data access rate to a maximum accepted output data transmission rate so as to provide a continuous and optimal data output transmission rate.

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~~39~~. (Amended) The method of claim ³³~~38~~, wherein the adjusting step includes one of adjusting the data retrieval rate, adjusting the decompression rate, and a combination thereof.

☐ **Please add the following New claims:**

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~~48~~. (New) The program storage device of claim 1, wherein the instructions for performing the step of compressing comprise instructions for performing lossless compression.

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